### PATENT

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/Peter L. Holmes/ Peter L. Holmes **Atty. Docket No.:** 10992023-3

**Applicant:** Maurer et al.

Serial No.: 10/627,518

Filing Date: 07/24/2003

Title: DUST TOLERANT WINDOWLESS

**SCANNER** 

**Group Art Unit: 2625** 

Examiner: Gibbs, Heather D

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Mail Stop Appeal Brief - Patents

## **REINSTATED APPEAL BRIEF**

#### I. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

### II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences which will directly affect, or be directly affected by, or have a bearing on, the Board's decision in the present appeal.

## III. STATUS OF CLAIMS

Claims 1-20 are pending and are set forth in the Appendix. No claims have been allowed. Applicant hereby appeals the rejections of claims 1-20.

## IV. STATUS OF AMENDMENTS

No amendments were filed subsequent to the final rejection.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

## A. Independent Claim 1

Independent claim 1 is directed to "[a] dust tolerant scanner [104]." [Figures 1, 2 and 4; Spec. at page 6, line 16 to page 9, line 12.] The claimed dust tolerant scanner includes "a housing [130] including optics [134, 136, 138, 140] which define an optical path [160] between an object focal plane [162] and a sensor focal plane [164]. [Figures 2 and 4; Spec. at page 6, line 32 to page 8, line 22.] The claimed dust tolerant scanner includes "a document feeder [142] mechanically coupled to the housing [130], the document feeder [142] including a reference surface [148 or 180] positioned adjacent the object focal plane [162], the document feeder [142] providing a media path [146] through the object focal plane [162], the document feeder [142] being configured to advance media along the media path [146]." [Figures 2 and 8-11; Spec. at page 7, lines 3-17; page 8, line 23 to page 9, line 12; page 9, line 32 to The claimed dust tolerant scanner includes "a media page 11, line 13.] conformance member [150] mechanically coupled to the housing [130] and positioned adjacent the reference surface [148 or 180], the media conformance member [150] including an aperture [152] through which the optical path [160] extends without obstruction such that dust or debris can fall through the aperture [152], the media conformance member [150] being formed such that media advanced by the document feeder [142] along the media path [146] is biased toward

the reference surface [148 or 180]." [Figures 2 and 4-7; Spec. at page 4, lines 7-13; page 7, line 9-11; page 8, lines 13-22; page 9, line 13 to page 10, line 2.]

# B. Independent Claim 6

Independent claim 6 is directed to "[a] media scan assembly [132] for a dust tolerant scanner [104]." [Figures 1, 2 and 4; Spec. at page 6, line 16 to page 9, line 12.] The claimed media scan assembly includes "an upper document feeder portion [142] and a lower document feeder portion [144] providing a media path [146], the upper document feeder portion [142] including a reference surface [148 or 180] adjacent the media path [146], the lower document feeder portion [144] including an aperture [152] facing the reference surface [148 or 180], the aperture [152] being formed such that dust or debris can fall through the aperture [152], the lower document feeder portion [144] being configured to be attached to a main housing [130] of the scanner [104]." [Figures 2 and 4-11; Spec. at page 7, lines 3-17; page 8, lines 13-22; page 9, lines 13-31; page 10, line 9 to page 11, line 13.] The claimed media scan assembly includes "at least one drive roller [174 or 176] configured to advance media along the media path [146]." [Figure 2; Spec. at page 8, line 23 to page 9, line 3.]

# C. Independent Claim 14

Independent claim 14 is directed to "[a] media scan assembly [132] for a dust tolerant scanner [104]." [Figures 1, 2 and 4; Spec. at page 6, line 16 to page 9, line 12.] The claimed media scan assembly includes "an upper document feeder portion [142] and a lower document feeder portion [144] defining a media path [146], the lower document feeder portion [144] including a media conformance member [150] shaped to push a piece of media against the upper document feeder portion [142], the media conformance member [150] including an aperture [152] shaped to provide an optical path [160] to the media path [146] and such that dust or debris can fall through the aperture [152]." [Figures 2 and 4-11; Spec. at page 7, lines 3-17; page 8, lines 13-22; page 9, line 4 to page 10, line 2; page 10, line 9 to page 11, line 13.]

The claimed media scan assembly includes "a media driver [170, 172, 174 or 176] configured to reposition media along the media path [146]." [Figure 2; Spec. at page 8, line 23 to page 9, line 3.]

## D. Independent Claim 18

Independent claim 18 is directed to "[a] media scan assembly [132] for a dust tolerant scanner [104]." [Figures 1, 2 and 4; Spec. at page 6, line 16 to page 9, line 12.] The claimed media scan assembly includes "an upper document feeder portion [142] and a lower document feeder portion [144] defining a media path [146], the upper document feeder portion [142] and the lower document feeder portion [144] being configured to advance media along the media path [146], the upper document feeder portion [142] including a reference surface [148 or 180], the lower document feeder portion [144] including an aperture [152] facing the reference surface [148 or 180], the media path [146] being configured to push a piece of media in the media path [146] against the reference surface [148 or 180], the aperture [152] providing an optical path [160] to the media path [146] and being formed such that dust or debris can fall through the aperture [152]." [Figures 2 and 4-11; Spec. at page 7, line 3 to page 10, line 2; page 10, line 9 to page 11, line 13.]

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

# A. Rejections Under Section 112

In the Office Action, claims 1-20 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. On pages 2-3 of the Office Action, the following was asserted:

The media conformance member needs to be claimed as two pieces as shown in Figure 2, reference 150. Applicant has not properly disclosed the media conformance member as claimed.

# B. Rejections Under Section 102

In the Office Action, claims 1-2, 4-20<sup>1</sup> were rejected under 35 U.S.C. 102(b) as being anticipated by Kellogg et al. (US 5,833,381). On pages 2-6 of the Office Action, the following was asserted:

## Independent claims 1, 6, 14 and 18

Regarding claim 1, Kellogg discloses A dust tolerant scanner, comprising: a housing including optics which define an optical path between an object focal plane and a sensor focal plane; a document feeder mechanically coupled to the housing, the document feeder including a reference surface positioned adjacent the object focal plane, the document feeder providing a media path through the object focal plane, the document feeder being configured to advance media along the media path; and a media conformance member mechanically coupled to the housing and positioned adjacent the reference surface, the media conformance member including an aperture through which the optical path extends without obstruction such that dust or debris can fall through the aperture, the media conformance member being formed such that media advanced by the document feeder along the media path is biased toward the reference surface (Fig 1; Col 3 Lines 7-10; 26-30; Col 4 Lines 27-53). [Looking at Fig 1, the wall where a gap is between reference 28 and the wall can be examined as being "an aperture through which the optical path extends)

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<sup>&</sup>lt;sup>1</sup> In the section of the Office Action entitled "Allowable Subject Matter", claim 3 was objected to as being dependent upon a rejected base claim (but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims).

- 6. Regarding claim 6, Kellogg discloses A media scan assembly for a dust tolerant scanner, the media scan assembly comprising: an upper document feeder portion and a lower document feeder portion providing a media path, the upper document feeder portion including a reference surface adjacent the media path, the lower document feeder portion including an aperture facing the reference surface, the aperture being formed such that dust or debris can fall through the aperture, the lower document feeder portion being configured to be attached to a main housing of the scanner; and at least one drive roller configured to advance media along the media path (Fig 4; Col 5 Lines 23-39; Col 6 Lines 1-20).
- 14. Regarding claim 14, Kellogg discloses A media scan assembly for a dust tolerant scanner, the media scan assembly comprising: an upper document feeder portion and a lower document feeder portion defining a media path, the lower document feeder portion including a media conformance member shaped to push a piece of media against the upper document feeder portion, the media conformance member including an aperture shaped to provide an optical path to the media path and such that dust or debris can fall through the aperture; and a media driver configured to reposition media along the media path (Fig 4; Col 5 Lines 23-39; Col 6 Lines 1-20).
- 18. Regarding claim 18, Kellogg discloses A media scan assembly for a dust tolerant scanner, the media scan assembly comprising: an upper document feeder portion and a lower document feeder portion defining a media path, the upper document feeder portion and the lower document feeder portion being configured to advance media along the media path, the upper document feeder portion including a reference surface, the lower document feeder portion including an aperture facing the reference surface, the media path being configured to push a piece of media in the media path against the reference surface, the aperture providing an optical path to the media path [and being formed such that dust or debris can fall through the aperture] (Fig 4; Col 5 Lines 23-39; Col 6 Lines 1-20).

## **Dependent Claims**

- **5.** For claim 5, Kellogg teaches wherein the media conformance member includes a ramp portion adjacent the aperture (Fig 3).
- 6. For claim 6, Kellogg discloses A media scan assembly for a dust tolerant scanner, the media scan assembly comprising: an upper document feeder portion and a lower document feeder portion providing a media path, the upper document feeder portion including a reference surface adjacent the media path, the lower document feeder portion including an aperture facing the reference surface, the aperture being formed such that dust or debris can fall through the aperture, the lower document feeder portion being configured to be attached to a main housing of the scanner; and at least one drive roller configured to advance media along the media path (Fig 4; Col 5 Lines 23-39; Col 6 Lines 1-20).

- **8.** Regarding claim 8, Kellogg discloses wherein the upper document feeder portion includes a raised portion adjacent the reference surface (Fig 6-7).
- **9.** Regarding claim 9, Kellogg discloses wherein raised portion is positioned after the reference surface along the media path (Fig 6-7).
- **12.** Regarding claim 9, Kellogg teaches wherein the media conformance member includes at least one ramp portion (Fig 4).
- **17.** Considering claim 17, Kellogg teaches wherein the media conformance member includes a top portion facing the reference surface and a ramp portion adjacent the top portion (Figs 6-7).
- **20.** With respect to claim 20, Kellogg discloses wherein the upper portion includes a raised surface which is positioned after the reference surface along the media path.

At page 2 of the Office Action, in the section entitled "Response to Arguments", the following was stated:

Applicant's request for reconsideration of the finality of the rejection of the last Office Action is persuasive and, therefore, the finality of that rejection is withdrawn. Applicant's arguments filed have been fully considered but they are not persuasive. Applicant argues Kellogg et al does not teach nor suggest "the media conformance member including an aperture through which the optical path extends without obstruction such that dust or debris can fall through the aperture" nor "the lower document feeder portion including an aperture facing the reference surface, the aperture being formed such that dust or debris can fall through the aperture". Upon further review, the Examiner finds this limitation to be taught in Col 4 Lines 23-29. Kellogg teaches the media chassis, which includes the lower document feeder, extends such that dust or debris can fall through the aperture. Examiner would like to point the applicant's attention to Figure 1.

## VII. ARGUMENTS

# A. Legal Standards

With respect to claim interpretation, the recent *en banc* Federal Circuit decision in *Phillips v. AWH Corp.*, 75 USPQ2d 1321, 1329, (Fed. Cir. 2005), indicated that "[t]he Patent and Trademark Office ("PTO") determines the scope of the claims in patent applications not solely on the basis of the claim language, but upon giving the claims their *broadest reasonable construction 'in light of the specification as it would be interpreted by one of ordinary skill in the art." Citations omitted, emphasis added.* 

Once a claim is interpreted, "[a] rejection for anticipation under section 102 requires that *each and every* limitation of the claimed invention be disclosed in a single prior art reference. In addition, the reference must be enabling and describe the applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." *In re Paulsen*, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994) (citations omitted). With respect to means-plus-function elements, MPEP § 2182 requires a *two-part analysis*. *First*, "the application of a prior art reference to a means or step plus function limitation *requires* that the prior art element *perform the identical function* specified in the claim." *Second*, "if a prior art reference teaches identity of function to that specified in a claim, then under *Donaldson* an examiner carries the <u>initial</u> burden of proof for showing that the prior art structure or step is the same as or equivalent to the structure, material, or acts described in the specification which has been identified as corresponding to the claimed means or step plus function."

Turning to obviousness, there are three requirements that must be met in order to establish as *prima facia* case of obviousness under 35 U.S.C. § 103. "First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when

combined) must teach or suggest *all the claim limitations*." MPEP § 2143, emphasis added.

### B. The Cited Reference

Kellogg et al. discloses a combination printer and scanner that includes a removable document feeder "for facilitating the clearing of paper jams, the cleaning of its scanner window and the removal of debris." [Kellogg et al., column 2, lines 1-5.] Referring to FIG. 1 of Kellogg et al.:

An operator may lift the pen door 56 to its open position illustrated in FIG. 1, remove the document feeder cartridge 62 and fix a paper jam, clean the scanner window 28 or remove any debris, such as dust, white-out residue, or a staple It is important to be able to clean the scanner window 28, since debris thereon may cause vertical streaks to appear in the facsimile reproduction of the document sent by the modem 34 when printed at the remote receiving station.

[Kellogg et al., column 4, lines 31-39.]

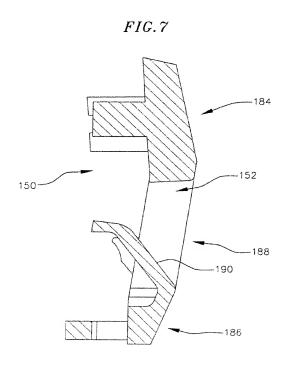
## C. The Rejection Under 35 U.S.C. § 112

In the Office Action, claims 1-20 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. On pages 2-3 of the Office Action, the following was asserted:

The media conformance member needs to be claimed as two pieces as shown in Figure 2, reference 150. Applicant has not properly disclosed the media conformance member as claimed.

# 1. Arguments Concerning Claims 1-20

FIG. 2 of Applicant's Specification is a cross-sectional view of the media conformance member 150, which (in this particular cross-sectional view) results in the media conformance member 150 appearing to be two pieces. However, as is clearly disclosed in Applicant's Specification (FIGs. 5-7, in particular), the media conformance member 150 is a single-piece structure that include an aperture 152. By way of example, FIG. 7 of Applicant's Specification is shown below:



For the reasons discussed above, it is abundantly clear that the Examiner's assertion ("media conformance member needs to be claimed as two pieces") is incorrect, and that Applicant's claims do particularly point out and distinctly claim the subject matter which applicant regards as the invention. Accordingly, this rejection under 35 U.S.C. § 112 is improper and should be reversed.

# D. The Rejection Under 35 U.S.C. § 102 Based on Kellogg et al. (US 5,833,381)

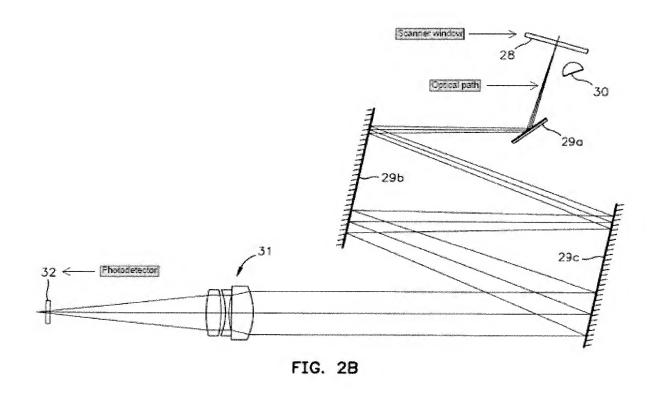
# 1. Arguments Concerning Claims 1-2, 4-20

Independent claims 1, 6, 14 and 18 each recite a combination including, *inter alia*, a "media conformance member [lower document feeder portion] including an aperture through which the optical path extends without obstruction such that dust or debris can fall through the aperture." The combination of claim 1 additionally recites: "the media conformance member being formed such that media advanced by the document feeder along the media path is biased toward the reference surface." Similarly, the combination of claim 11 includes "a media conformance member which biases media advanced along the media path toward the reference surface." Similarly, the combination of claim 14 includes "a media conformance member shaped to push a piece of media against the upper document feeder portion." The combination of claim 18 additionally recites: "the media path being configured to push a piece of media in the media path against the reference surface."

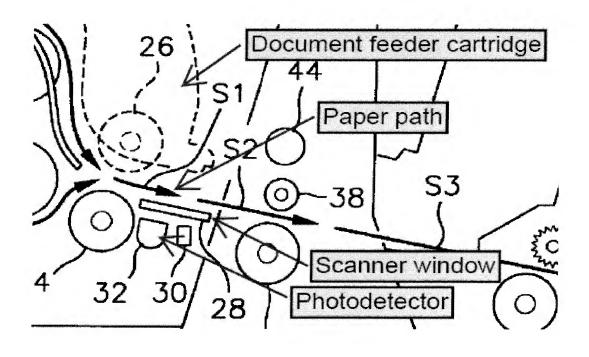
At page 2 of the Office Action, it was asserted that "Kellogg teaches the media chassis, which includes the lower document feeder, extends such that dust or debris can fall through the aperture." Applicant respectfully traverses any assertion that Kellogg anticipates any of the claims in the subject application.

As a preliminary matter, it is clear from the discussion in Kellogg et al. (quoted above) that the scanner window 28 is a piece of transparent material (such as glass) that may need to be cleaned from time to time.

FIG. 2B of Kellogg et al. is shown below, with annotations added.



A portion of FIG. 1 of Kellogg et al. is shown below, with annotations added.



As shown in FIGs. 1 and 2B, the optical path in Kellogg et al. extends from the paper path S1, through the scanner window 28 and through the optics elements 29a, 29b, 29c and 31 (not shown in FIG. 1), to the photodetector 32.

Scanner window 28 is <u>not</u> a "media conformance member including an aperture". Kellogg et al. fails to disclose or suggest any structure that even vaguely resembles a "media conformance member including an aperture through which the optical path extends without obstruction such that dust or debris can fall through the aperture".

A principle object of Kellogg et al. (also quoted above) is to provide a removable document feeder cartridge 62 for facilitating cleaning of the scanner window 28. Any assertion that the scanner window 28 is an aperture through which dust or debris can fall is clearly erroneous, and any such assertion is strenuously traversed.

At page 3 of the Office Action, the following was asserted:

[Looking at Fig 1, the wall where a gap is between reference 28 and the wall can be examined as being "an aperture through which the optical path extends)

With all due respect, the above assertion is preposterous on its face. As shown and discussed above, the optical path goes through the scanner window 28, not around the side of the scanner window 28 and adjacent to the wall.

Thus, with regard to claims 1, 6, 14 and 18, Kellogg et al. does not disclose or suggest a media conformance member/lower document feeder portion including an aperture through which the optical path extends without obstruction such that dust or debris can fall through the aperture.

To the extent that Kellogg et al. discloses a "reference surface", such a surface appears to be provided by an underside portion of the removable document feeder cartridge 62 when in its closed position. To the extent that Kellogg et al. discloses a "media conformance member", such a member appears to be provided by the scanner window 28 -- shown as a flat object in FIG. 1 of Kellogg et al.

Thus, further with regard to claim 1, because the scanner window 28 is a flat object, it is respectfully submitted that Kellogg et al. provides no disclosure or

suggestion of "the media conformance member being formed such that media advanced by the document feeder along the media path is biased toward the reference surface." Similarly, with regard to claim 11, Kellogg et al. provides no disclosure or suggestion of "a media conformance member which biases media advanced along the media path toward the reference surface." Similarly, with regard to claim 14, Kellogg et al. provides no disclosure or suggestion of "a media conformance member shaped to push a piece of media against the upper document feeder portion." Similarly, with regard to claim 18, Kellogg et al. provides no disclosure or suggestion of "the media path being configured to push a piece of media in the media path against the reference surface."

As noted above, in Kellogg et al. the scanner window 28 is shown as a flat object in FIG. 1. Thus, further with regard to claim 5, Kellogg et al. provides no disclosure or suggestion that "the media conformance member includes a ramp portion adjacent the aperture." Similarly, with regard to claim 12, Kellogg et al. provides no disclosure or suggestion that "the media conformance member includes at least one ramp portion." Similarly, with regard to claim 17, Kellogg et al. provides no disclosure or suggestion that "the media conformance member includes a top portion facing the reference surface and a ramp portion adjacent the top portion."

From the Examiner's comments regarding claims 5, 12 and 17, it would appear that the Examiner is taking the position that the white background element 82 (of feeder cartridge 62) constitutes a media conformance member as claimed by Applicant. If this is the case, then the rejection is improper because the white background element 82 does not include an aperture through which an optical path extends.

An additional claimed feature relates to the raised portion 220 (FIG. 2) which functions to curl a piece of media upward to prevent the back edge of the piece of media from falling into the aperture 152. Further with regard to claim 8, Kellogg et al. provides no disclosure or suggestion that "the upper document feeder portion includes a raised portion adjacent the reference surface." Further with regard to claim 9, Kellogg et al. provides no disclosure or suggestion that the "raised portion is positioned after the reference surface along the media path." Similarly, with regard to claim 20, Kellogg et al. provides no disclosure or suggestion that "the upper

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portion includes a raised surface which is positioned after the reference surface along the media path." The Examiner has not specifically identified the element(s) in FIGs. 4, 6-7 of Kellogg et al. that constitute the "raised portion..." as claimed by Applicant. Kellogg et al., column 5, lines 23-29 (cited by the Examiner) merely pertains to mounting of the white background element 82 to the lower document feeder cartridge section 62b.

For the reasons discussed above, it clear that that Kellogg et al. does not disclose **each and every** limitation of the claimed invention. Accordingly, this rejection under 35 U.S.C. § 102 is improper and should be reversed.

### VIII. CLOSING REMARKS

As Applicant has shown above, the rejections of claims 1-20 are improper and should be reversed.

Respectfully submitted,

Date: February 20, 2007

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#### **CLAIMS APPENDIX**

- 1. A dust tolerant scanner, comprising:
- a housing including optics which define an optical path between an object focal plane and a sensor focal plane;

a document feeder mechanically coupled to the housing, the document feeder including a reference surface positioned adjacent the object focal plane, the document feeder providing a media path through the object focal plane, the document feeder being configured to advance media along the media path; and

a media conformance member mechanically coupled to the housing and positioned adjacent the reference surface, the media conformance member including an aperture through which the optical path extends without obstruction such that dust or debris can fall through the aperture, the media conformance member being formed such that media advanced by the document feeder along the media path is biased toward the reference surface.

- 2. A dust tolerant scanner as claimed in claim 1, wherein the optics include a mirror positioned at an opposite side of the housing from the object focal plane.
- 3. A dust tolerant scanner as claimed in claim 2, wherein the mirror is a dust or debris collecting surface.
- 4. A dust tolerant scanner as claimed in claim 1, wherein the document feeder is an automatic document feeder.
- 5. A dust tolerant scanner as claimed in claim 1, wherein the media conformance member includes a ramp portion adjacent the aperture.
- 6. A media scan assembly for a dust tolerant scanner, the media scan assembly comprising:

an upper document feeder portion and a lower document feeder portion providing a media path, the upper document feeder portion including a reference surface adjacent the media path, the lower document feeder portion including an aperture facing the reference surface, the aperture being formed such that dust or debris can fall through the aperture, the lower document feeder portion being configured to be attached to a main housing of the scanner; and

at least one drive roller configured to advance media along the media path.

- 7. A media scan assembly as claimed in claim 6, wherein the upper document feeder portion includes a spring which mechanically couples the reference surface to the upper document feeder portion.
- 8. A media scan assembly as claimed in claim 6, wherein the upper document feeder portion includes a raised portion adjacent the reference surface.
- 9. A media scan assembly as claimed in claim 8, wherein raised portion is positioned after the reference surface along the media path.
- 10. A media scan assembly as claimed in claim 6, wherein the reference surface is white.
- 11. A media scan assembly as claimed in claim 6, wherein the lower document feeder portion includes a media conformance member which biases media advanced along the media path toward the reference surface.
- 12. A media scan assembly as claimed in claim 11 wherein the media conformance member includes at least one ramp portion.
- 13. A media scan assembly as claimed in claim 6, wherein the at least one drive roller is mechanically coupled to the lower document feeder portion.
- 14. A media scan assembly for a dust tolerant scanner, the media scan assembly comprising:

an upper document feeder portion and a lower document feeder portion defining a media path, the lower document feeder portion including a media conformance member shaped to push a piece of media against the upper document feeder portion, the media conformance member including an aperture shaped to

provide an optical path to the media path and such that dust or debris can fall through the aperture; and

a media driver configured to reposition media along the media path.

- 15. A media scan assembly as claimed in claim 14, wherein the upper document feeder portion includes a reference surface which faces the aperture.
- 16. A media scan assembly as claimed in claim 15, wherein the reference surface is substantially uniform in color.
- 17. A media scan assembly as claimed in claim 15, wherein the media conformance member includes a top portion facing the reference surface and a ramp portion adjacent the top portion.
- 18. A media scan assembly for a dust tolerant scanner, the media scan assembly comprising:

an upper document feeder portion and a lower document feeder portion defining a media path, the upper document feeder portion and the lower document feeder portion being configured to advance media along the media path, the upper document feeder portion including a reference surface, the lower document feeder portion including an aperture facing the reference surface, the media path being configured to push a piece of media in the media path against the reference surface, the aperture providing an optical path to the media path and being formed such that dust or debris can fall through the aperture.

- 19. A media scan assembly as claimed in claim 18, wherein the lower document feeder portion includes an angled surface which is positioned before the reference surface along the media path.
- 20. A media scan assembly as claimed in claim 18, wherein the upper portion includes a raised surface which is positioned after the reference surface along the media path.

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None.
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# **RELATED PROCEEDINGS APPENDIX**

None.